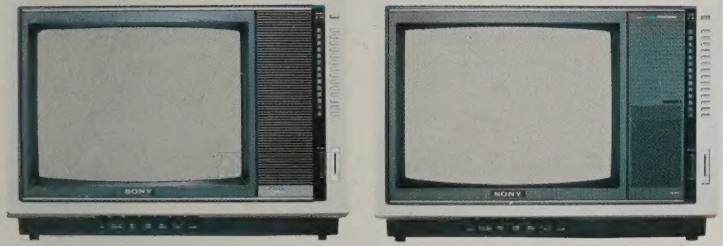
SONY®

TRINITRON® COLOR TV RECEIVER

KV-1913/1914



OPERATING INSTRUCTIONS

OWNER'S RECORD

The model and serial numbers are located at the rear. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. _____ Serial No. _____

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PROPERTY OF DEPT. C-270
METROLOGY LAB.
DO NOT REMOVE
FROM AREA
9-18-80

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Congratulations on choosing this advanced Sony Color TV Receiver. For best results, please read this manual thoroughly before operating the set, and keep these instructions handy for future reference.

WARNING

To prevent fire or shock hazard, do not expose the set to rain or moisture.

Dangerously high voltages are present inside the set. Do not open the cabinet. Refer servicing to qualified personnel only.

PRECAUTIONS

- Operate only on 120V ac.
- Should any liquid or solid object fall into the cabinet, unplug the set and have it checked by qualified personnel before operating it any further.
- Allow adequate air circulation to prevent internal heat build-up. Do not place the set on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Unplug the set from the wall outlet when it is not to be used for an extended period of time.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- This set is equipped with a polarized AC power cord plug (one blade of the plug is wider than the other), which will fit into the power outlet only one way. Should you be unable to insert the plug fully into the outlet, try reversing the plug. Should the plug still fail to fit, contact your dealer for assistance. Do not defeat the safety purpose of the polarized plug.
- Do not install the set in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Save the original shipping carton and packing material; they will come in handy if you ever have to ship your set. For maximum protection, repack your set as it was originally packed at the factory.
- To keep the set looking brand-new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents such as thinner or benzine, or abrasive cleansers, since these will damage the cabinet. As a safety precaution, unplug the set before cleaning it.

For detailed safety precautions, see the leaflet "IMPORTANT SAFEGUARDS" included with this manual in the vinyl bag.

FEATURES

- Your Sony Color TV features the unique ECONOQUICK system, which provides a picture within seconds after the set is switched on. Unlike conventional instant-picture systems, there is absolutely no power consumption when the set is not in use. This system represents the latest development of the TRINITRON picture tube.
- Advanced new automatic circuits are built into your Sony Color TV to eliminate the necessity for frequent readjustments of the tuning and color controls.

A touch of the AFT Switch instantly activates these circuits to tune your set for peak performance: A touch of the AUTO Switch locks the color processing system to factory preset values that assure realistic reproduction of every shade and tint.

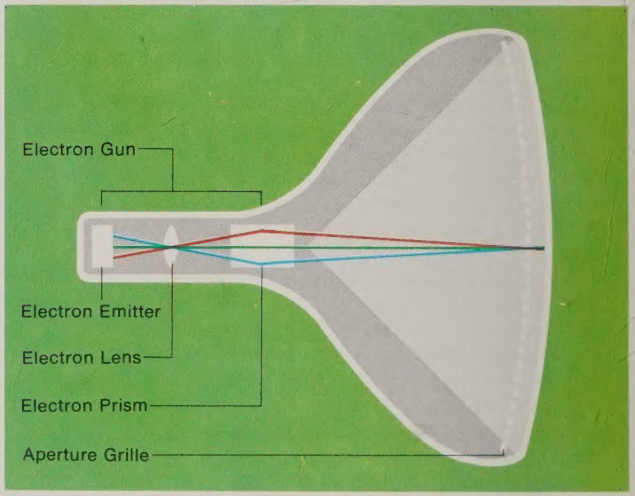
- Channel-select Buttons provide preset tuning of up to 14 channels; VHF, UHF or inactive channels (for monitoring the playback of a video tape recorder). The channel selection is easily made by pressing one button.

TRINITRON SYSTEM

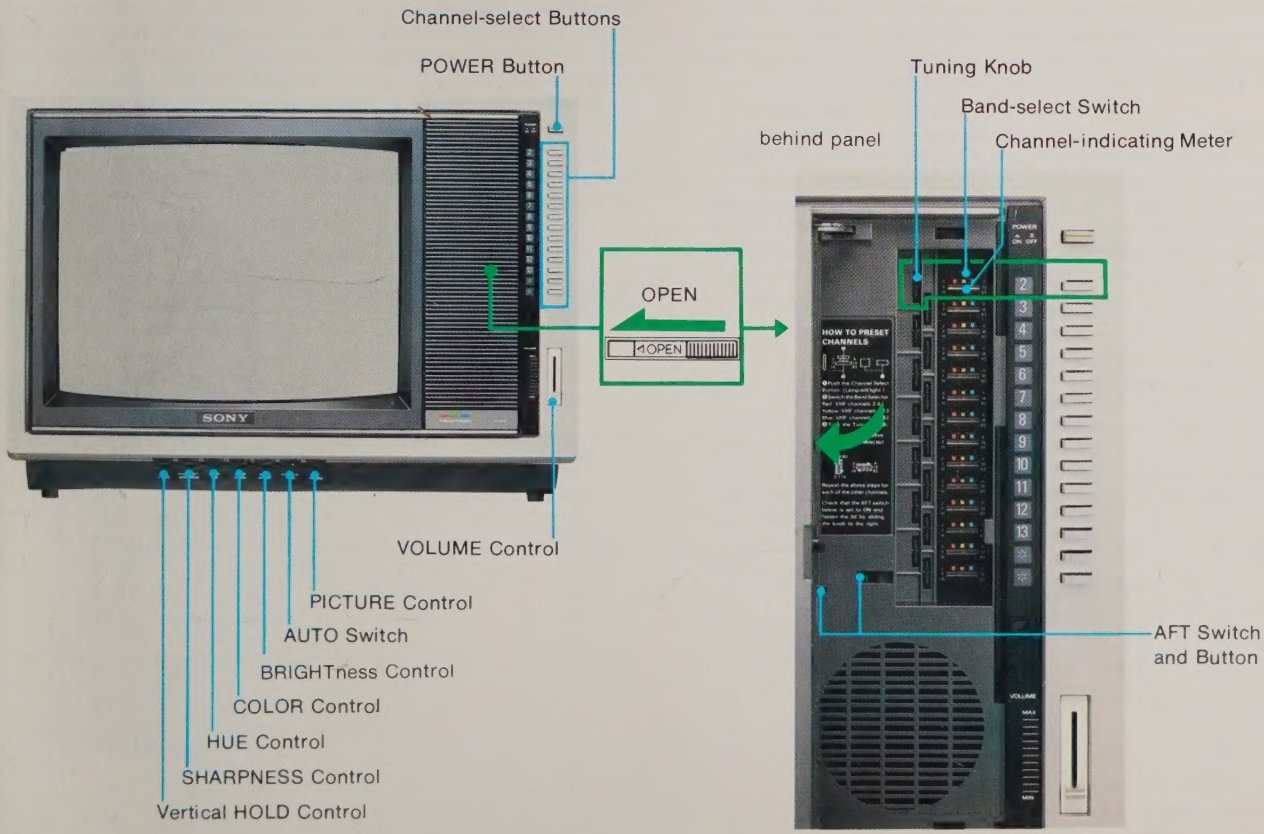
Your Sony Color TV employs the latest concept in color-image reproduction...the TRINITRON System. A product of intensive engineering research, the TRINITRON System ensures bright, sharp pictures and few service requirements.

The system consists of the TRINITRON Gun and "Aperture Grille". The TRINITRON Gun produces the three beams that excite the primary phosphors on the screen. The beams are aimed and focussed by a unique set of electron lenses and a pair of electron prisms. Pictures stay sharp at all points on the screen because all three beams pass through the center of a large lens. The Aperture Grille color-selection system allows a larger amount of electrons to pass through it to provide high brightness on the screen.

"Guard Grille", a series of non-reflecting vertical stripes that alternate with the phosphor color stripes, absorbs ambient light reflections. Moreover, this TV employs newly developed phosphors. The result is a high-contrast, brighter picture with no increase in energy consumption.



LOCATION OF CONTROLS

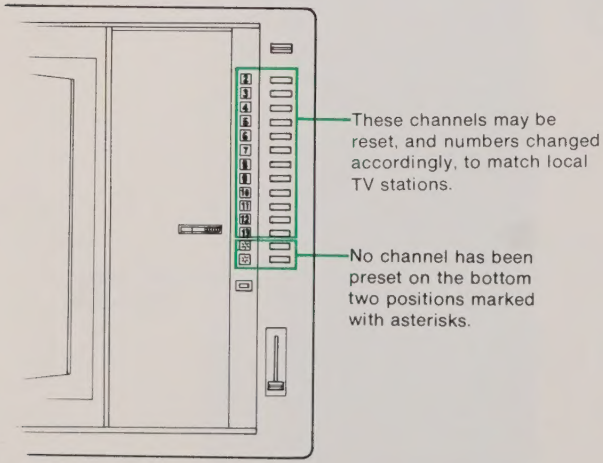


CHANNEL PRESETTING

Your Sony color TV uses an electronic tuning system that is capable of receiving up to 14 television channels or other program sources. Once you preset the channels, any channel can be selected by pressing the Channel-select Button on the front panel.

Introduction

The Channel-select Buttons marked 2 through 13 are preadjusted at the factory to VHF channels 2–13. This results in blank positions interspersed with regular TV channels. Those positions that are not used to receive local stations and the bottom two positions may be used to select other program sources such as a connected cable TV system, surveillance television camera or video tape recorder. Any channel position can be set up to receive any local station, VHF or UHF, or other source.


These channels may be reset, and numbers changed accordingly, to match local TV stations.
No channel has been preset on the bottom two positions marked with asterisks.

Selecting the stations

Determine and list which channels (up to 14) are to be set, and the order in which you would like them arranged. Consult your local TV listings to find out the channels in use ("active") in your area.

Suppose that the following channels are active in your city:

VHF: Channels 2, 4, 5, 7, 9, 11 and 13

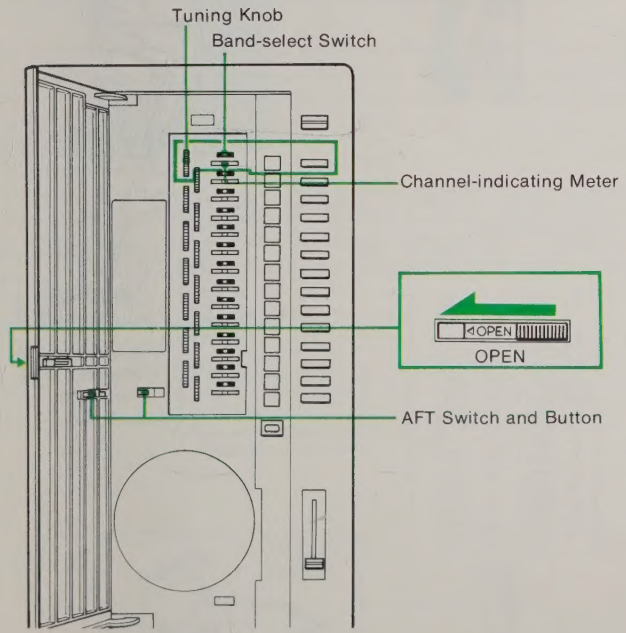
UHF: Channels 21, 25, 31, 41 and 47

Then the positions would be arranged (in numerical order for convenience) as follows:

Position No.	Channel No.	Enter *your* channel numbers below: Position No.	Channel No.
1	2	1	
2	4	2	
3	5	3	
4	7	4	
5	9	5	
6	11	6	
7	13	7	
8	21	8	
9	25	9	
10	31	10	
11	41	11	
12	47	12	
13	VTR	13	
14	*	14	

Preliminary instructions

Slide the fastening knob to the left and open the front-panel compartment lid fully to expose the controls. Each Channel-select Button is associated with a Band-select Switch, a Tuning Knob and a Channel-indicating Meter under the Band-select Switch.



Adjusting the channels

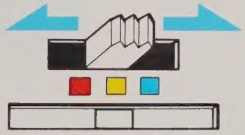
Press the POWER Button to turn on the TV, and proceed as follows:

❶ Press the first Channel-select Button, which will light up.

❷ Set the Band-select Switch for that pushbutton 1 to one of the three color-coded positions:

For Channels 2 through 6, set to Red.
For Channels 7 through 13, set to Yellow.
For Channels 14 through 83, set to Blue.

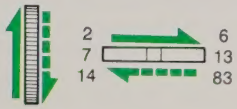
(In the foregoing example, position 1 was reserved for channel 2, thus the Band-select Switch would be set to Red.)



❸ Turn the Tuning Knob either upwards for higher-numbered channels or downwards for lower-numbered channels until the desired station is properly tuned in.

• The Channel-indicating Meter provides a visual indication of the approximate position of the selected channel number within the operating range of the Band-select Switch.

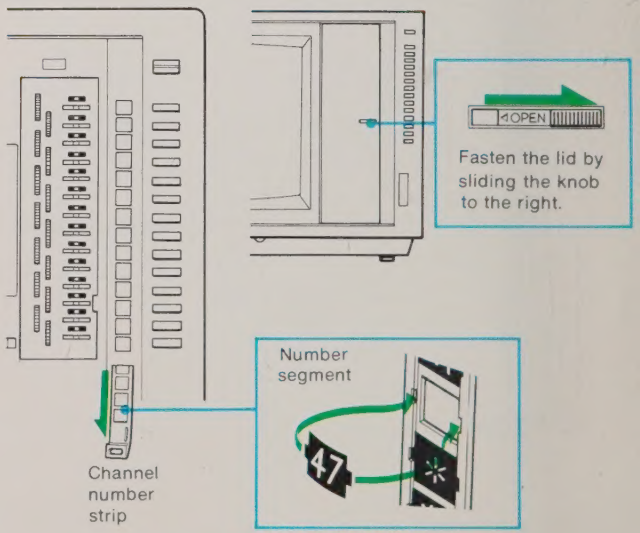
right.....higher-numbered channels
left.....lower-numbered channels



When the picture appears, slowly turn the Tuning Knob upwards until a herringbone pattern appears in the colored parts of the picture, then turn the knob downwards until the herringbone pattern just disappears and the picture is clear.
Adjust the indoor antenna while tuning. (Refer to page 10.).

- To identify the channels, consult a newspaper or TV program guide, or use another TV set if available, to view what is being telecast during the adjustment.

Repeat the 3-step procedure for all the active channels in your area. When all stations have been set up as desired, remove the channel number strip from the channel window and replace the original number segments with correct ones from the supplied number sheet as illustrated. An asterisk (*) segment may be used to indicate an inactive channel. Replace the strip.

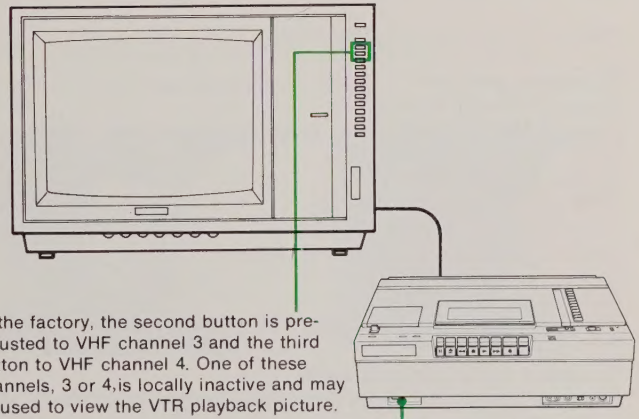


Remarks

- When the front-panel compartment lid is opened, the AFT Button is released and the AFT (Automatic Fine Tuning) circuit will be deactivated to permit an accurate tuning adjustment. When the adjustments have been completed, make sure that the AFT Switch at the rear of the lid is set to ON and fasten the lid by sliding the knob to the right so that the AFT Button is depressed by the AFT Switch to lock in the correct signals.
- To use your TV set with a cable television system, contact a representative of the cable company for instructions regarding channel selection. In most cases, this adjustment will be made by the cable company at the time of installation.

To preset for VTR playback

To view the playback picture from a Sony Betamax video tape recorder (or other VTR) equipped with an RF output terminal, connect a VHF antenna to the recorder (not to the TV) and then connect the VHF (or RF) OUT terminal of the recorder to the VHF antenna terminal of the TV.



At the factory, the second button is pre-adjusted to VHF channel 3 and the third button to VHF channel 4. One of these channels, 3 or 4,is locally inactive and may be used to view the VTR playback picture.

Sony Betamax videocassette recorder

If you wish to preset some other position to receive the signals from the recorder, complete the connections and proceed as follows.

❶ Set the recorder to the playback mode.
The signal from the recorder will be fed to the TV.

❷ Press the Channel-select Button to be preset for viewing the playback picture.

❸ Set the Band-select Switch to Red.

❹ Turn the Tuning Knob until VHF channel 3 or 4 (the operating channel of the rf unit built into the recorder) is received, whereupon a clear picture will be obtained.

OPERATION

Plug the TV set into a working outlet.

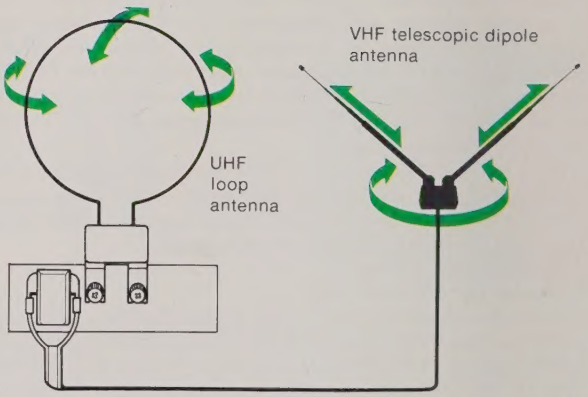
To switch on the TV
Press the POWER Button.
To switch off, press the button again.

To select a channel
Push the Channel-select Button which is preset to the desired channel. (See "Channel Presetting" on page 6.) The selected channel number will light and the picture will appear.

To increase the sound level
Slide the VOLUME Control upwards; to decrease, slide it downwards.

To operate in the automatic mode
Set the AFT Switch to ON and close the lid completely, thus depressing the AFT Button. The AFT (Automatic Fine Tuning) locks in the correct signal and secures sharper pictures on all channels.
Turn the AUTO Switch to ON. The AUTO color circuit locks onto preset levels of hue and color to provide correct reproduction.

To adjust the indoor antenna
For VHF reception, use the VHF telescopic dipole antenna; adjust the length, direction and angle of both elements symmetrically for the best possible picture.
For UHF reception, raise the UHF loop antenna. Swing the loop back and forth and/or sideways until the best available picture is obtained.



When an outdoor antenna is to be used, refer to page 12.

To adjust brightness and contrast
Correct brightness and contrast settings are important for good color reproduction. Once the brightness has been set correctly, the contrast can be controlled with the PICTURE Control without altering color reproduction. Perform the following adjustments.

❶ Turn the PICTURE Control fully counterclockwise.
❷ Adjust the BRIGHT Control so that the darkest parts of the picture are seen as black.
❸ Adjust the PICTURE Control from the lowest setting to the desired level according to your preference and room lighting conditions.
The PICTURE Control will adjust the contrast, color intensity and brightness simultaneously in the proper ratio.
A center detent position that provides a setting suitable for average use is incorporated in the BRIGHT and PICTURE Controls.

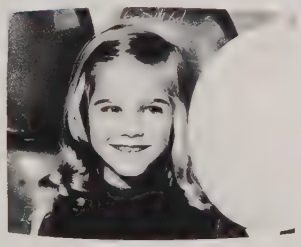
To adjust sharpness
Turn the SHARPNESS Control to SHARP for maximum sharpness. Turn the control to SOFT for a softer picture. If reception conditions cause a snowy picture, more pleasing results will be obtained with a softer picture.
A center detent position that provides a setting suitable for average use is incorporated in this control.

To adjust color and hue manually
Both COLOR and HUE Controls have a limited adjustment range in the AUTO mode. If you wish to control color reproduction manually, turn the AUTO Switch to OFF, thus disengaging the automatic color mode.

Adjust the COLOR Control for the desired color intensity.

Picture becomes pale.

Picture becomes vivid.



Adjust the HUE Control for the most natural skin tones.

Skin tone becomes purplish.

Skin tone becomes greenish.

• The color and hue adjustments have no effect upon black and white programs.

Vertical hold control
If the picture rolls vertically, adjust the V HOLD Control.

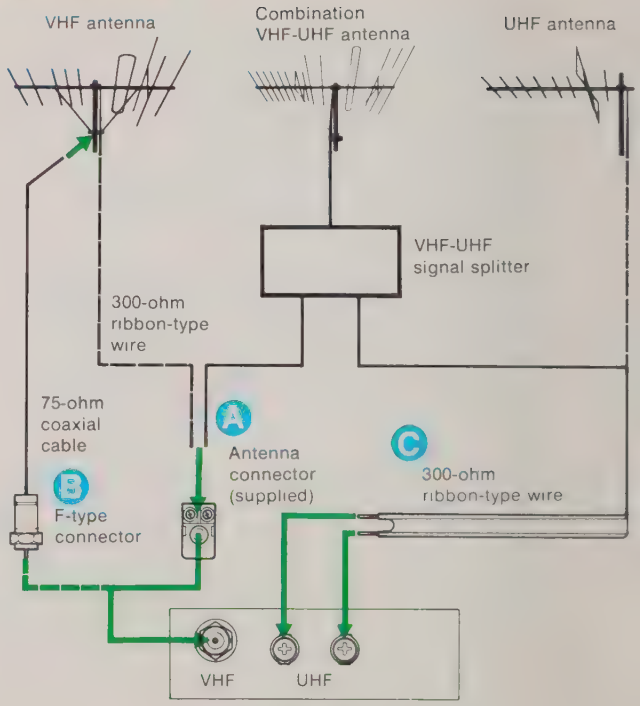
EXTERNAL ANTENNA CONNECTION

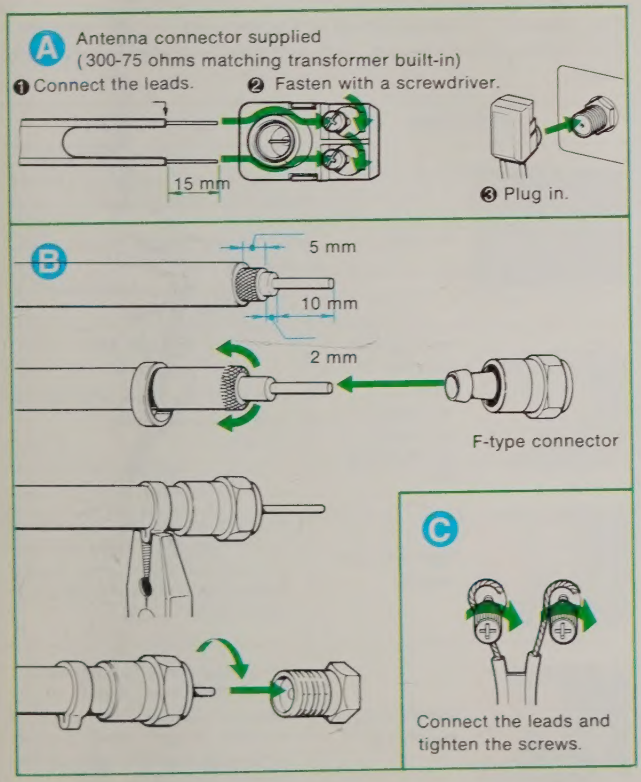
In difficult reception areas (inside steel-frame buildings, in mountainous areas, or at great distances from the transmitter), the use of an external antenna will give better reception.
VHF and UHF antennas with separate lead-in wires, or a combination VHF-UHF antenna with a single lead-in wire may be used. When a combination VHF-UHF antenna is in use, the signals, separated by a VHF-UHF signal splitter, are fed to the VHF and UHF terminals of the TV respectively.

Connection to the VHF Antenna Terminal
Pull out the Antenna Connector from the VHF Antenna Terminal, thus disconnecting the VHF telescopic dipole antenna.
When using a 300-ohm ribbon-type lead-in, connect the leads to the Antenna Connector, previously attached to the leads from the VHF indoor antenna, then connect the Antenna Connector to the VHF Antenna Terminal. — (A)
When using a 75-ohm coaxial cable lead-in from the antenna, connect it to the VHF Antenna Terminal with an F-type connector (optional). — (B)

Connection to the UHF Antenna Terminals
Loosen the nuts on the UHF Antenna Terminals, pull out the lugs of the UHF loop antenna, then connect a 300-ohm ribbon-type lead-in wire to the UHF Antenna Terminals. — (C)

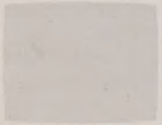
Note: When using the TV with a video tape recorder, connect a suitable antenna to the recorder, and connect the VHF Antenna Terminal of the TV to the VHF (or RF) OUT terminal of the recorder. For details, refer to the operating instructions furnished with the recorder.




A
Antenna connector supplied
(300-75 ohms matching transformer built-in)
❶ Connect the leads.
❷ Fasten with a screwdriver.
15 mm
❸ Plug in.
B
5 mm
10 mm
2 mm
F-type connector
C
Connect the leads and
tighten the screws.

CHECKING THE SET BY YOURSELF

Many apparent malfunctions may be caused by slight misadjustments of the regular controls or some other equally simple cause. If any difficulty arises in the operation of your set, first check through this illustrated list of symptoms and corrections. Should the difficulty persist, unplug the set and contact your Sony dealer.

SYMPTOM	CORRECTION
no picture (screen not lit), no sound	• Plug the set into a working outlet.
 **no picture (screen not lit), but good sound**	• Turn the BRIGHT Control clockwise ↻. • Turn the PICTURE Control clockwise ↻.
good picture but no sound	• Slide the VOLUME Control upwards.
no picture, no sound, but snow and noise only	• Connect the antenna properly. • Check the outdoor antenna.

SYMPTOM	CORRECTION
no color	• Turn the AUTO Switch to ON. • Set the AFT Switch to ON and close the compartment lid completely. • Turn the COLOR Control clockwise ↻. • Perform the channel presetting as specified on page 6.
herringbone pattern, stripes, no color, no picture, too indistinct, etc.	• Perform the channel presetting as specified on page 6.
dotted lines or stripes	• Often caused by interference from autos, neon signs, hair dryers, electric razors, etc. Try adjusting the antenna for minimum interference.
double images or "ghosts"	• Readjust the indoor antenna. Reflections from nearby mountains or buildings often cause this problem. In such cases, a highly directional outdoor antenna may improve the picture.

SPECIFICATIONS

Television system	American TV standards
Channel coverage	VHF channels 2–13 UHF channels 14–83 (a total of up to 14 preselected channels)
Picture tube	Trinitron tube 19-inch picture measured diagonally 100-degree deflection
Antenna	VHF telescopic dipole antenna UHF loop antenna 75-ohm VHF external antenna terminal 300-ohm UHF external antenna terminals
Speaker	10 cm (4 inches) dia.
Power requirements	120 V ac, 60 Hz
Power consumption	115 W (max.) 73 W (average)
Dimensions	approx. 678 × 481 × 471 mm (w/h/d) (26¾ × 19 × 18⅝ inches)
Weight	approx. 27 kg (59 lb 8 oz)
Accessory supplied	Channel number segments

Design and specifications are subject to change without notice.

Sony Corporation Printed in Japan

4-495-936-**21** (2)